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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,203	03/03/2004	Bernarr C. Schaeffer		4198

7590 02/24/2006  
Joseph B. Taphorn  
8 SENIC DRIVE; HAGAN FARMS  
POUGHKEEPSIE, NY 12603-5521

EXAMINER

FASTOVSKY, LEONID M

ART UNIT PAPER NUMBER

3742

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/792,203	<b>Applicant(s)</b> SCHAEFFER ET AL.	
	<b>Examiner</b> Leonid M. Fastovsky	<b>Art Unit</b> 3742	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-12 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 13-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Hochstein (5,649,972).

Hochstein discloses an apparatus 10 comprising a finned infrared source 42 comprising a base 44 to be inherently heated to uncomfortable to touch high temperature (Fig. 2-4, col. 5, lines 22-45) and fins-protrusions 70 fabricated from a material having low thermal conductivity (col.8, lines 65-67 and col. 9, lines 1-10) and capable of being comfortable to touch even though the base 44 is at uncomfortable temperature since all the structure is there and the claim limitations are met.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8, 11-12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langensiepen (1,720,334) in view of Hjortsberg (4,908,497).

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Langensiepen discloses a heater comprised of two sets of parallel electrically resistive bars-fins "e" that radiate heat and therefore is inherently the infrared heater with a broad range of wavelength, the corresponding bars-fins "e" being juxtaposed (Fig. 3) and electric conductors "d" interconnecting corresponding ends of the bars. However, he does not teach current with 180 degree out of phase and an insulating substrate.

Hjortsberg discloses two electric heating elements 1 and 2 that adhered to a plastic inherently electrically insulating film-substrate (col. 1, lines 5-20) that can be used in heaters where the device is brought into proximity with the human body and current flows in opposite directions (Fig. 1-4, col. 2, lines 51-61). It would have been obvious to one having ordinary skill in the art to modify Langensiepen's invention to include an insulating film-substrate with two heating elements mounted on the opposite sides of the substrate ( in reference to claim 8) and powered by an alternating current with 180 degree out of phase as taught by Hjortsberg that produces little or no external electromagnetic fields (col. 2, lines 51-61) that occurs when applying 180 degree out of phase electrical current.

As for claim 12, it would have been obvious to one having ordinary skill in the art to modify the invention of Langensiepen in view of Hjortsberg to have fins separated by less than a finger width in order to prevent the user from being hurt by heat when he gets in contact with the heater.

As for claim 21, it would have been obvious to one having ordinary skill in the art to modify the invention of Langensiepen in view of Hjortsberg to place a shield overlaying

the heaters and protrusions in order to protect the user from being hurt by the high temperature.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hochstein.

Hochstein discloses substantially the claimed invention, but does not disclose how far fins are separated. It would have been obvious to one having ordinary skill in the art to modify Hochstein's invention to have fins separated by less than a finger width in order to prevent the user from being hurt by heat when he gets in contact with the heater.

6. Claim 19 is rejected as being unpatentable over Hall (5,897,804) in view of Hjortsberg.

Hall discloses a method of sweating a person in sauna comprising primarily heating the person by direct infrared radiation from the infrared heater 40, but does not disclose the method for causing a user to sweat by direct infrared absorption on several sides by the infrared radiation and a low frequency electromagnetic field. Hjortsberg discloses two electric heating elements 1 and 2 that can be used in heaters where the device is brought into proximity with the human body and current flows in opposite directions in order to decrease of the electromagnetic field (Fig. 1-4, col. 2, lines 51-61).

It would have been obvious to one having ordinary skill in the art to modify Hall's invention to have the heater powered by alternating current as taught by Hjorstberg that produces little or no external electromagnetic fields (col. 2, lines 51-61) that occurs when applying 180 degrees out of phase electrical current and also include additional infrared heaters on several sides in order to provide better heat of the person's body.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hall. Hall discloses substantially the method of sweating the person inherently shielding the person from physical contact with the infrared heater 40, but does not disclose protrusions and several heaters. It would have been obvious to one having ordinary skill in the art to modify Hall's invention to include additional infrared heaters on several sides in order to provide better heat of the person's body, and also to include protrusions in the heater as a an alternative choice since the person is distanced from the heater anyway is precluded from contact therewith.

***Allowable Subject Matter***

8. Claims 13 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 8-12 and 19 - 21 have been considered but are moot in view of the new ground(s) of rejection.

As for claim 8, Langensiepen discloses a heater comprised of two sets of parallel electrically resistive bars-fins "e" that radiate heat and therefore is inherently the infrared heater with a broad range of wavelength. Also, it would have been obvious to one having ordinary skill in the art to modify Langensiepen's invention to include an insulating film-substrate with two heating elements mounted on the opposite sides of the substrate and powered by an alternating current with 180 degree out of phase as taught by Hjortsberg that produces little or no external electromagnetic fields (col. 2, lines 51-61) that occurs when applying 180 degree out of phase electrical current.

As for claim 9, Hochstein discloses the fins-protrusions 70 fabricated from a material having low thermal conductivity (col.8, lines 65-67 and col. 9, lines 1-10), and although coating is applied to the inner surface 75 of the protrusions 70, it does not effect the surface of the protrusions 70, and therefore the top surface of the protrusions is capable

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of being comfortable to touch even though the base 44 is at uncomfortable temperature since all the structure is there and the claim limitations are met.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid M Fastovsky whose telephone number is 571-272-4778. The examiner can normally be reached on M-Th. 8.00 am -6.00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Leonid M Fastovsky  
Examiner  
Art Unit 3742

lmf

*2/21/06*

  
ROBIN EVANS  
SUPERVISORY PATENT EXAMINER  
*2/21/06*